

**N-DIMENSIONAL DETERMINATION OF BIT-ERROR RATES****Abstract**

A method for measuring a bit error rate in a communication system that includes  
5 a transmitter, a medium, and a receiver. The method may include identifying a plurality  
of causes of bit errors. For each cause, the communication system is measured to  
determine a corresponding probability density function. Each of the corresponding  
probability density functions is integrated over an interval representing a range in which  
the corresponding cause creates a bit error, thereby generating a plurality of integrated  
10 quantities. The integrated quantities are summed to arrive at a bit error rate for the  
communication system. An apparatus may be programmed to execute the foregoing  
method.